IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

In re Application of: Andreas MICHL	Confirmation No.: 9387
Application No.: 10/567,474	Group Art Unit: 2466
Filed: February 3, 2006	Examiner: Lee, Jae Young

For: MESSAGE ANALYSER AND ANALYSIS METHOD

Commissioner for Patents
Alexandria, VA 22313-1450

APPEAL BRIEF

Dear Sir:

This Appeal Brief is submitted in support of the Notice of Appeal dated February 23, 2010.

I.   REAL PARTY IN INTEREST

Rohde & Schwarz GmbH & Co. KG is the real party in interest.

II.   RELATED APPEALS AND INTERFERENCES

Appellants are unaware of any related appeals and interferences.

III.   STATUS OF THE CLAIMS

Claims 1, 2, 4, 6-11, 13, and 15-21 are pending in this appeal, in which claims 3, 5, 12, and 14 have earlier been canceled. No claim is allowed. This appeal is therefore taken from the final rejection of claims 1, 2, 4, 6-11, 13, and 15-21 on November 24, 2009.

IV.   STATUS OF AMENDMENTS

All amendments have been entered.

V.   SUMMARY OF THE CLAIMED SUBJECT MATTER

The claimed invention addresses problems associated with analyzing messages which are transmitted between the individual layers of the Open Systems Interconnection (OSI) reference model. Specifically, the claimed invention provides a message analyzer and method for analyzing messages in which an evaluation of a characteristic feature for plural messages which are transmitted via one service access point is possible, without requiring all of the information relating to all available messages to be read in by the message analyzer.

Independent claim 1 provides for the following:

1. A message analyzer for analyzing messages which are transmitted via at least one service access point from layers of an Open Systems Interconnection (OSI) reference model of an end system of a subscriber of a mobile telephone system, the message analyzer comprising (See, for example, page 7, line 33- page 8, line 27; FIG. 2, element 10):

a storage device for storing messages (See, for example, Specification, page 8, lines 28-30; FIG. 2, element 13);

a selector for reading in a sequence of temporally successive messages (See, for example, Specification, page 8, line 28-page 9, line 11; FIG. 2, element 14); and

a display device for displaying, on a single screen, a first region and a second region (See, for example, Specification, page 9, lines 17-20; FIG. 2, element 15, 16, and 17, and FIG. 3),

wherein the sequence of messages is read in by means of the selector from the storage device and displayed listed in the first region (See, for example, Specification, page 9, lines 21-31),

wherein the selector determines, for the at least one service access point, a first characteristic feature of the messages which are transmitted via the at least one service access point and a course of the first characteristic feature is displayed on the display device in the second region (See, for example, Specification, page 10, line 7- page 11, line 20),

wherein the sequence of messages read in by the selector is dependent upon a selection with which a specific point of the course of the first characteristic feature is selectable in the second region (See, for example, Specification, page 11, lines 11-20), and

wherein the display device is configured to display a selectable marking produced automatically by the selector in the second region based on a predefined additional item of information stored during storage of messages in the storage device (See, for example, Specification, page 15, line 30- page 16, line 18; FIG. 3, elements 33.1-33.4), and

wherein upon selection of the marking, a sequence of messages which corresponds to the specific point of the selected marking is read in from the storage device (See, for example, Specification, page 15, line 30- page 16, line 18).

Independent claim 4 provides for the following:

4. A message analyzer for analyzing messages which are transmitted via at least one service access point from layers of an Open Systems Interconnection (OSI) reference model of an end system of a subscriber of a mobile telephone system, the message analyzer comprising (See, for example, page 7, line 33- page 8, line 27; FIG. 2, element 10):

a storage device for storing messages (See, for example, Specification, page 8, lines 28-30; FIG. 2, element 13);

a selector for reading in a sequence of temporally successive messages (See, for example, Specification, page 8, line 28-page 9, line 11; FIG. 2, element 14); and

a display device for displaying, on a single screen, a first region and a second region (See, for example, Specification, page 9, lines 17-20; FIG. 2, element 15, 16, and 17, and FIG. 3),

wherein the sequence of messages is read in by means of the selector from the storage device and displayed listed in the first region (See, for example, Specification, page 9, lines 21-31),

wherein the selector determines, for the at least one service access point, a first characteristic feature of the messages which are transmitted via the at least one service access point and a course of the first characteristic feature is displayed on the display device in the second region (See, for example, Specification, page 10, line 7- page 11, line 20),

wherein the sequence of messages read in by the selector is dependent upon a selection with which a specific point of the course of the first characteristic feature is selectable in the second region (See, for example, Specification, page 15, line 30- page 16, line 18; FIG. 3, elements 33.1-33.4), and

wherein a plurality of specific points are marked by respective markings in the course displayed in the second region and, upon selection of a marking of the markings, a sequence of messages which corresponds to the specific point of the selected marking is read in from the storage device (See, for example, Specification, page 15, line 30- page 16, line 18; FIG. 3, elements 33.1-33.4).

Independent claim 10 provides for the following:

10.   A method using a computer or a digital signal processor for analyzing messages which are transmitted via at least one service access point from layers of an OSI reference model of an end system of a subscriber of a mobile telephone system (See, for example, Specification, page 8, line 28-page 9, line 11; FIG. 2, element 14) and which are stored in a storage device (See, for example, Specification, page 8, lines 28-30; FIG. 2, element 13), comprising the steps of (See, for example, page 7, line 33- page 8, line 27; FIG. 2, element 10):

reading in a sequence of messages by a selector (See, for example, Specification, page 8, line 28-page 9, line 11; FIG. 2, element 14); and

displaying the sequence of messages which is read in by the selector, in tabular form in a first region of a single screen of a display device ((See, for example, Specification, page 9, lines 17-31; FIG. 2, element 15/16, and FIG. 3), wherein

a first characteristic feature of messages which are transmitted via the at least one service access point is determined by the selector (See, for example, Specification, page 10, line 7- page 11, line 20)

and a course of the first characteristic feature is displayed in a second region of the single screen of the display device (See, for example, Specification, page 10, line 7- page 11, line 20),

further comprising:

selecting, in the second region, a specific point of the course of the first characteristic feature; and (See, for example, Specification, page 11, lines 11-20)

reading in, by the selector, a sequence of messages dependent upon the specific point (See, for

example, Specification, page 15, line 30- page 16, line 18; FIG. 3, elements 33.1-33.4),

wherein:

during storage of the messages in the storage device, a predefined additional item of

information is stored (See, for example, Specification, page 15, line 30- page 16, line 18),

and

dependent upon the predefined additional item of information, a selectable marking is

produced automatically in the second region by the selector (See, for example,

Specification, page 15, line 30- page 16, line 18; FIG. 3, elements 33.1-33.4), and

upon selection of the marking, dependent upon the specific point marked by the selected

marking, a corresponding sequence of messages is read in by the selector from the storage

device (See, for example, Specification, page 15, line 30- page 16, line 18).

Independent claim 13 provides for the following:

13.   A method using a computer or a digital signal processor for analyzing messages which

are transmitted via at least one service access point from layers of an OSI reference model of an

end system of a subscriber of a mobile telephone system and which are stored in a storage device,

comprising the steps of:

reading in a sequence of messages by a selector (See, for example, Specification, page 8, line

28-page 9, line 11; FIG. 2, element 14); and

displaying the sequence of messages which is read in by the selector, in tabular form in a first

region of a single screen of a display device (See, for example, Specification, page 9, lines

17-20; FIG. 2, element 15, 16, and 17, and FIG. 3), wherein

a first characteristic feature of messages which are transmitted via the at least one service

access point is determined by the selector (See, for example, Specification, page 10, line

7- page 11, line 20),

and a course of the first characteristic feature is displayed in a second region of the single

screen of the display device (See, for example, Specification, page 10, line 7- page 11,

line 20),

further comprising:

selecting, in the second region, a specific point of the course of the first characteristic feature

(See, for example, Specification, page 11, lines 11-20); and

reading in, by the selector, a sequence of messages dependent upon the specific point (See, for

example, Specification, page 11, lines 11-20), wherein:

in the second region, a plurality of specific points of the course of the first characteristic

feature are marked by respective marking (See, for example, Specification, page 15, line

30- page 16, line 18; FIG. 3, elements 33.1-33.4)s, and

upon selection of a marking of the markings, dependent upon the specific point marked by the

selected marking, a corresponding sequence of messages is read in by the selector from

the storage device (See, for example, Specification, page 15, line 30- page 16, line 18).

VI.   GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL

Whether claims 1, 2, 4, 6-11, 13, and 15-21 are obvious under 35 U.S.C. § 103 based on

Pruthi et al. (US 2002/0105911) in view of *Bahadiroglu et al.* (US 2002/0186660), *Ennis, Jr. et*

al. (US 5,867,483), and *Hilliker* (US 2002/0100422)?

VII.   ARGUMENT

> **A.   CLAIMS 1, 2, 4, 6-11, 13, and 15-21 ARE NOT RENDERED OBVIOUS BY**
> **_PRUTHI_ IN VIEW OF _BAHADIROGLU_, _ENNIS_, AND _HILLIKER_**
> **BECAUSE NONE OF THE REFERENCES TEACHES OR SUGGESTS**
> **"UPON SELECTION OF THE MARKING, A SEQUENCE OF MESSAGES**
> **WHICH CORRESPONDS TO THE SPECIFIC POINT OF THE**
> **SELECTED MARKING IS READ IN FROM THE STORAGE DEVICE."**

The Examiner erred in rejecting claims 1, 2, 4, 6-11, 13, and 15-21 under 35 U.S.C. § 103

based on *Pruthi* in view of *Bahadiroglu*, *Ennis*, and *Hilliker*.

The initial burden of establishing a *prima facie* basis to deny patentability to a claimed

invention under any statutory provision always rests upon the Examiner. *In re Mayne*, 104 F.3d

1339, 41 USPQ2d 1451 (Fed .Cir. 1997); *In re Deuel*, 51 F.3d 1552, 34 USPQ2d 1210 (Fed. Cir.

1995); *In re Bell*, 991 F.2d 781, 26 USPQ2d 1529 (Fed. Cir. 1993); *In re Oetiker*, 977 F.2d 1443,

24 USPQ2d 1443 (Fed. Cir. 1992). In rejecting a claim under 35 U.S.C. § 103, the Examiner is

required to provide a factual basis to support the obviousness conclusion. *In re Warner*, 379 F.2d

1011, 154 USPQ 173 (CCPA 1967); *In re Lunsford*, 357 F.2d 385, 148 USPQ 721 (CCPA 1966);

In re Freed, 425 F.2d 785, 165 USPQ 570 (CCPA 1970).

Obviousness rejections require some evidence in the prior art of a teaching, motivation, or

suggestion to combine and modify the prior art references. See, e.g., *McGinley v. Franklin*

Sports, Inc., 262 F.3d 1339, 1351-52, 60 USPQ2d 1001, 1008 (Fed. Cir. 2001); *Brown &*

Williamson Tobacco Corp. v. Philip Morris Inc., 229 F.3d 1120, 1124-25, 56 USPQ2d 1456, 1459 (Fed. Cir. 2000); *In re Dembiczak*, 175 F.3d 994, 999, 50 USPQ2d 1614, 1617 (Fed. Cir. 1999).

The Patent Office must give specific reasons why one of ordinary skill in the art would have been motivated to combine the references. See, e.g., *In re Kotzab*, 217 F.3d 1365, 1371, 55 USPQ2d 1313, 1317 (Fed. Cir. 2000); *In re Rouffet*, 149 F.3d 1350, 1359, 47 USPQ2d 1453, 1459 (Fed. Cir. 1998).

The Administrative Procedures Act (APA) mandates the Patent Office to make the necessary findings and provide an administrative record showing the evidence on which the findings are based, accompanied by the reasoning in reaching its conclusions. See *In re Zurko*, 258 F.3d 1379, 1386, 59 USPQ2d 1693, 1697 (Fed. Cir. 2001); *In re Gartside*, 203 F.3d 1305, 1314, 53 USPQ2d 1769, 1774 (Fed. Cir. 2000). In particular, the Patent Office must articulate and place on the record the "common knowledge" used to negate patentability. *In re Zurko, id.*; *In re Lee*, 277 F.3d 1338, 1344-45, 61 USPQ2d 1430, 1434-35 (Fed. Cir. 2002).

The Final Office Action states that *Pruthi* discloses displaying a sequence of messages in FIG. 17 (a first region), a selector determining a first characteristic feature of the messages and displaying a course of that feature in FIG. 20 (a second region), and storing an additional item of information for the messages. The Final Office Action admits (pages 4-5) that the combination of *Pruthi* and *Bahadiroglu* fails to teach or suggest "the sequence of messages read in by the selector is dependent upon a selection with which a specific point of the course of the first characteristic feature selected is selectable in the second region, selectable marking, and upon selection of the marking, a sequence of messages which corresponds to the specific point of the selected marking is read in from the storage device."

Referring to column 15, lines 7-14 and FIG. 3 of *Ennis*, the Final Office Action (page 5)

asserts that *Ennis* discloses a sequence of messages read in by a selector is dependent upon a

selection of a selectable marking in the course of the first characteristic feature. The Final Office

Action contends that it would have been obvious "to incorporate the sequence of messages read

in by the selector is dependent upon a selection with which a specific point of the course of the

first characteristic feature selected is selectable in the second region, selectable marking, and

upon selection of the marking, a sequence of messages which corresponds to the specific point of

the selected marking is read in from the storage device." *Ennis*, however, selects, based on a

characteristic feature, a portion of data displayed in a first area to display in a second area in the

same way that *Pruthi* displays a portion of data separately. There is no teaching or suggestion to

then select a marking on the <u>second display</u> area based on <u>an additional feature</u> to read in <u>another</u>

<u>sequence</u> of messages that corresponds to the marking. The only teaching that Ennis arguably

adds to the disclosure of *Pruthi* is the selection of a marking.

The Advisory Action on January 29, 2010, responds:

> Pruthi teaches TCP flow information including start/stop time, original host,
> original port, original bytes, term host, term port, term bytes, RTT, response,
> rexmit bytes (Fig. 17), TCP level Bit Rate, TCP Level Packet Rate, TCP Level
> Counts, TCP Level Counts by Source, Statistics (Fig. 20), statistics in memory
> (paragraph 0036 lines 13-16), providing the statistics to display device (paragraph
> 0037 lines 8-11). The first characteristic feature is equivalent to TCP level bit rate
> while the additional information is equivalent to the statistics. By referring to Fig.
> 28, the statics includes totoal [sic] number of bytes, verage [sic] rate in Bits/Sec,
> Maximum packet size, etc. Although Fig. 20 teaches UDP information, same
> information can be provided to TCP flow by clicking "statistics" button on the
> screen. Ennis teaches a pointer is manipulable via mouse along the bar graph
> horizontal axis to select a particular fifteen minute interval for which a
> corresponding pie chart 84, 86 is generated and the pie chart is displayed directly
> below the bar graph from which the fifteen minute interval is selected, and
> includes a label indicating the actual time of day the selected interval represents
> (Fig. 11; col 15 lines 7-14), probe, RAM (Fig. 3), console retrieves the appropriate
> probe data from the short term database table (col 15 lines 36: 45). Ennis is cited

to show the sequence of messages which indicates utilization during certain period of time within a additional section of the same window display, at a specific point of cursor. Therefore, it is obvious to show statistics during a period of time by selecting a specific point of cursor on TCP level bit rate plot instead of using statistics button by Pruthi and Bahadiroglu in combination with Ennis in order to displaying information, such as the statistics, on a display devices by using various charts e.g. plot, histogram, and pie.

However, as explained *supra*, Ennis selects, based on a characteristic feature, a portion of data displayed in a first area to display in a second area in the same way that *Pruthi* displays a portion of data separately. There is nothing in any of the cited passages/figures that would have suggested to the skilled artisan to select a marking on the <u>second display</u> area based on <u>an additional feature</u> to read in <u>another sequence</u> of messages that corresponds to the marking, as recited in the claims.

The Final Office Action relies on *Hilliker* for the selector automatically producing the markings. *Hilliker*'s markings are automatically produced, but they are not on a second display area that displays a course of a first characteristic feature of messages displayed in a first display area, nor are the markings selectable to read in a second sequence of messages based on a second feature. The values of all of the markings in *Hilliker* are displayed in a table, and the table does not represent a sequence of messages according to a second feature. Accordingly, none of *Pruthi*, *Bahadiroglu*, *Ennis*, or *Hilliker*, alone or in combination, teaches or suggests upon selection of the marking based on a second item of information, another sequence of messages which corresponds to the selected marking is read in from the storage device.

Therefore, the Honorable Board is respectfully requested to reverse the Examiner's rejection of claims 1, 2, 4, 6-11, 13, and 15-21 under 35 U.S.C. § 103, because *Pruthi*, *Bahadiroglu*, *Ennis*, and *Hilliker* do not disclose or suggest the limitations of the claims.

VIII.   CONCLUSION AND PRAYER FOR RELIEF

For the foregoing reasons, Appellants request the Honorable Board to reverse each of the Examiner's rejections.

To the extent necessary, a petition for an extension of time under 37 C.F.R. § 1.136 is hereby made. Please charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, to Deposit Account 504213 and please credit any excess fees to such deposit account.

Respectfully Submitted,

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IX. CLAIMS APPENDIX

1. A message analyzer for analyzing messages which are transmitted via at least one service access point from layers of an Open Systems Interconnection (OSI) reference model of an end system of a subscriber of a mobile telephone system, the message analyzer comprising:

a storage device for storing messages;

a selector for reading in a sequence of temporally successive messages; and

a display device for displaying, on a single screen, a first region and a second region,

wherein the sequence of messages is read in by means of the selector from the storage device and displayed listed in the first region,

wherein the selector determines, for the at least one service access point, a first characteristic feature of the messages which are transmitted via the at least one service access point and a course of the first characteristic feature is displayed on the display device in the second region,

wherein the sequence of messages read in by the selector is dependent upon a selection with which a specific point of the course of the first characteristic feature is selectable in the second region, and

wherein the display device is configured to display a selectable marking produced automatically by the selector in the second region based on a predefined additional item of information stored during storage of messages in the storage device, and

wherein upon selection of the marking, a sequence of messages which corresponds to the specific point of the selected marking is read in from the storage device.

2. A message analyzer according to claim 1, wherein:

the selector determines a second characteristic feature for messages which are transmitted via

a plurality of service access points of a layer of the OSI reference model, the a course of

the second characteristic feature is displayed on the display device in the second region.

3. (Canceled)

4. A message analyzer for analyzing messages which are transmitted via at least one service

access point from layers of an Open Systems Interconnection (OSI) reference model of an end

system of a subscriber of a mobile telephone system, the message analyzer comprising:

a storage device for storing messages;

a selector for reading in a sequence of temporally successive messages; and

a display device for displaying, on a single screen, a first region and a second region,

wherein the sequence of messages is read in by means of the selector from the storage device

and displayed listed in the first region,

wherein the selector determines, for the at least one service access point, a first characteristic

feature of the messages which are transmitted via the at least one service access point and

a course of the first characteristic feature is displayed on the display device in the second

region,

wherein the sequence of messages read in by the selector is dependent upon a selection with

which a specific point of the course of the first characteristic feature is selectable in the

second region, and

wherein a plurality of specific points are marked by respective markings in the course

displayed in the second region and, upon selection of a marking of the markings, a

sequence of messages which corresponds to the specific point of the selected marking is read in from the storage device.

5. (Canceled)

6. A message analyzer according to claim 1, wherein:

the course of the first characteristic feature is displayed in the second region in a coordinate system, wherein the X axis of the coordinate system is a time axis.

7. A message analyzer according to claim 6, wherein:

a third region of the course displayed in the second region which corresponds respectively to the sequence of messages currently displayed in the first region, is highlighted.

8. A message analyzer according to claim 1, wherein:

the course of the first characteristic feature is displayed in the second region in a coordinate system, wherein the X axis of the coordinate system is subdivided into intervals each having an identical number of messages.

9. A message analyzer according to claim 1, wherein:

the first characteristic feature is a number of transmitted messages per interval of time or a data load of a layer of the OSI reference model or a number of messages transmitted repeatedly.

10. A method using a computer or a digital signal processor for analyzing messages which are transmitted via at least one service access point from layers of an OSI reference model of an end system of a subscriber of a mobile telephone system and which are stored in a storage device, comprising the steps of:

reading in a sequence of messages by a selector; and

displaying the sequence of messages which is read in by the selector, in tabular form in a first

   region of a single screen of a display device, wherein

a first characteristic feature of messages which are transmitted via the at least one service

   access point is determined by the selector

and a course of the first characteristic feature is displayed in a second region of the single

   screen of the display device,

further comprising:

selecting, in the second region, a specific point of the course of the first characteristic feature;

   and

reading in, by the selector, a sequence of messages dependent upon the specific point,

   wherein:

during storage of the messages in the storage device, a predefined additional item of

   information is stored, and

dependent upon the predefined additional item of information, a selectable marking is

   produced automatically in the second region by the selector, and

upon selection of the marking, dependent upon the specific point marked by the selected

   marking, a corresponding sequence of messages is read in by the selector from the storage

   device.

11. A method according to claim 10, further comprising:

determining, by the selector, a second characteristic feature of messages which are transmitted

   via a plurality of service access points of a layer of the OSI reference model.

12. (Canceled)

13.   A method using a computer or a digital signal processor for analyzing messages which are transmitted via at least one service access point from layers of an OSI reference model of an end system of a subscriber of a mobile telephone system and which are stored in a storage device, comprising the steps of:

reading in a sequence of messages by a selector; and

displaying the sequence of messages which is read in by the selector, in tabular form in a first region of a single screen of a display device, wherein

a first characteristic feature of messages which are transmitted via the at least one service access point is determined by the selector

and a course of the first characteristic feature is displayed in a second region of the single screen of the display device,

further comprising:

selecting, in the second region, a specific point of the course of the first characteristic feature; and

reading in, by the selector, a sequence of messages dependent upon the specific point, wherein:

in the second region, a plurality of specific points of the course of the first characteristic feature are marked by respective markings, and

upon selection of a marking of the markings, dependent upon the specific point marked by the selected marking, a corresponding sequence of messages is read in by the selector from the storage device.

14. (Canceled)

15. A method according to claim 10, wherein:

at least one characteristic feature is displayed in the second region in a coordinate system, wherein the X axis of the coordinate system is a time axis.

16. A method according to claim 15, wherein:

a third region which corresponds respectively to the sequence of messages displayed in tabular form in the first region is displayed highlighted in the second region.

17. A method according to claim 10, wherein:

the first characteristic feature is displayed in the second region in a coordinate system, wherein the X axis of the coordinate system is sub-divided into intervals each having an identical number of messages.

18. A message analyzer according to claim 1, wherein the predefined additional item of information is defined as a specific event that occurs during a test run.

19. A message analyzer according to claim 18, wherein the specific event is a change of attenuation.

20. A method according to claim 10, wherein the predefined additional item of information is defined as a specific event that occurs during a test run.

21. A method according to claim 20, wherein the specific event is a change of attenuation.

X.   <u>EVIDENCE APPENDIX</u>

Appellants are unaware of any evidence that is required to be submitted in the present Evidence Appendix.

XI.   <u>RELATED PROCEEDINGS APPENDIX</u>

Appellants are unaware of any related proceedings that are required to be submitted in the present Related Proceedings Appendix.